



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/764,966	01/26/2004	Michael F. Angelo	200314542-1	9327

22879 7590 06/29/2007
HEWLETT PACKARD COMPANY
P O BOX 272400, 3404 E. HARMONY ROAD
INTELLECTUAL PROPERTY ADMINISTRATION
FORT COLLINS, CO 80527-2400

EXAMINER

NALVEN, ANDREW L

ART UNIT	PAPER NUMBER
----------	--------------

2134

MAIL DATE	DELIVERY MODE
-----------	---------------

06/29/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)
	10/764,966	ANGELO ET AL.
	Examiner Andrew L. Nalven	Art Unit 2134

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 26 January 2004.
- 2a) This action is FINAL. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-37 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 1-5 and 7-37 is/are rejected.
- 7) Claim(s) 6 is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on 26 January 2004 is/are: a) accepted or b) objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) Notice of References Cited (PTO-892)
- 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) Information Disclosure Statement(s) (PTO/SB/08)
 Paper No(s)/Mail Date 1/26/04, 3/29/04.
- 4) Interview Summary (PTO-413)
 Paper No(s)/Mail Date. _____.
- 5) Notice of Informal Patent Application
- 6) Other: _____.

DETAILED ACTION

1. Claims 1-37 are pending.

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

2. **Claims 13-20 are rejected under 35 U.S.C. 101** because the claims are directed towards nonstatutory subject matter in the form of a computer program that is not claimed as embodied on a computer readable medium and executed by a computer system. The cited claims are an example of functional descriptive material consisting of data structures and programs that impart functionality when employed as executed by a computer component. The functionality of functional descriptive material is realized only when the functional descriptive material is claimed as being embodied on a computer readable medium and is claimed as executed by a computer component. The cited claims provide no tangible computer components that work in conjunction with the functional descriptive material to impart functionality and as a result the claims are not statutory because they fail the practical application requirement of § 101 by failing to provide a useful, concrete, and tangible result (see MPEP 2106).

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. **Claims 4-6, 8, 18, 22, 26, 28 are rejected under 35 U.S.C. 112, second paragraph,** as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
4. With regards to claim 4-6, 18, 22, 28, the limitation "measuring a system" is unclear because it is unclear what aspect of the system is being measured and what the system is.
5. With regards to claims 8, 26, the claims define that the at least one key is comprised of two keys. It is unclear how a single key can be both a private key and a public key in a situation where there is only one key.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Art Unit: 2134

6. **Claims 31-32 are rejected under 35 U.S.C. 102(e)** as being anticipated by Challener US Patent No. 7,095,859.

7. **With regards to claim 31,** Challener teaches the act of initializing the security modules in a system so that the security module has at least one common key with another security module (Challener, column 4 lines 55-65, migrating private key from one machine to another).

8. **With regards to claims 32,** Challener teaches the security module comprises a trusted platform module (Challener, column 4 lines 12-67, client TPM 22 and server TPM processor 44).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. **Claims 1-5, 7-30, 33-34, 36-37 are rejected under 35 U.S.C. 103(a)** as being unpatentable over Challener US Patent No. 7,095,859 in view of Williams US Patent No. 5,559,883.

10. **With regards to claims 1, 13, 21,** Challener teaches a method of initializing a security module (Challener, column 4 lines 55-65, key is generated or received in order to allow use) the method comprising the acts of generating at least one key if the

Art Unit: 2134

security module is the controlling security module (Challener, column 4 lines 55-65, client or server generates the private key) and receiving at least one key from another security module if the security module is the subordinate security module (Challener, column 4 line 60 – column 5 line 6, private key is migrated to other machine). Challener fails to specifically disclose a step of determining whether the security module is a controlling module or a subordinate security module. However, Williams teaches determining whether the security module is a controlling module or a subordinate security module (Williams, column 11 lines 15-65, management module detects failure of the primary security module). At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to utilize William's method of determining whether there a module is controlling or subordinate because it offers the advantage of ensuring that a primary module is always available and that a module failure will not stop system operation (Williams, column 11 lines 44-53).

11. **With regards to claim 2,** Challener as modified teaches the act of initializing the security modules in a system so that the security module has at least one common key with another security module (Challener, column 4 lines 55-65, migrating private key from one machine to another).

12. **With regards to claims 3, 14, 24, 37,** Challener as modified teaches the security module comprises a trusted platform module (Challener, column 4 lines 12-67, client TPM 22 and server TPM processor 44).

Art Unit: 2134

13. **With regards to claim 4,** Challener as modified teaches measuring a system once the at least one key is generated (Williams, column 11 lines 34-44, measures a time window to determine if failure occurred).
14. **With regards to claims 5, 18, 22, 28,** Challener as modified teaches the security module measuring a system once the at least one key is generated (Williams, column 11 lines 34-44, measures a time window to determine if failure occurred).
15. **With regards to claims 7, 16, 25,** Challener as modified teaches the at least one key comprising an endorsement key (Challener, column 4 lines 55-65, private key).
16. **With regards to claims 8, 26,** Challener as modified teaches the at least one key comprising a private key and a public key (Challener, column 4 lines 55-67, private key and non-migratable public key).
17. **With regards to claims 9, 19, 29,** Challener as modified teaches the act of accessing a lock bit to determine if the security module is the controlling security module or the subordinate security module (Williams, column 11 lines 40-45, status flag).
18. **With regards to claim 10,** Challener as modified teaches the lock bit being a setting within the memory of the system (Williams, column 11 lines 40-45, status flag stored at port).
19. **With regards to claims 11, 20,** Challener as modified teaches accessing the lock bit via a bus coupled to the security module and the memory or via a bus and an input/output controller coupled between the security module and the memory (Williams,

Art Unit: 2134

column 11 lines 43-53, management module accesses the port, Challener, column 4 lines 5-11).

20. **With regards to claim 12**, Challener as modified teaches the act of determining if the security module in the system is initialized (Challener, column 5 lines 6-21, queries to determine if private key is stored).

21. **With regards to claim 15**, Challener as modified teaches the act of determining if the security module has undergone TPM initialization (Challener, column 5 lines 6-21, queries to determine if private key is stored).

22. **With regards to claim 17**, Challener as modified teaches the at least one key comprising a private key (Challener, column 4 lines 55-67, private key).

23. **With regards to claims 23, 36**, Challener and Williams teach everything described above with regards to claim 1 and further teach a processor (Challener, column 3 lines 55-60, cpu), a hard disk operatively coupled to the processor and configured to store data for the processor (Challener, column 3 lines 55-60, hard disk), a memory operatively coupled to the processor and configured to store data retrieved from the hard disk for use by the processor (Challener, column 3 lines 55-60, computers with CPUs have attached RAM to stored data retrieved from a hard disk) and a first security module and a second security module each operatively coupled to the processor and the memory (Challener, column 3 line 55 – column 4 line 12, TPM, Williams, column 11 lines 15-60, multiple security modules). Examiner further contends that video controllers operatively coupled to the processor and configured to produce a display signal are well known in the art and it would have been obvious to one of

Art Unit: 2134

ordinary skill in the art to incorporate a video controller to allow a user to utilize the system using graphical user interfaces.

24. **With regards to claim 27**, Challener as modified teaches the first and second security modules are each adapted to determine if that security module has undergone TPM initialization (Challener, column 5 lines 6-21, queries to determine if private key is stored).

25. **With regards to claims 30, 34**, Challener as modified teaches the memory and the first security module are connected together on a bus and communicate through a bridge with the processor (Williams, column 11 lines 43-53, management module accesses the port, Challener, column 4 lines 5-11).

26. **With regards to claims 33**, Challener fails to teach accessing a lock bit in a memory by each of the plurality of security modules if the security module has not been initialized. However, Williams teaches accessing a lock bit in a memory by each of the plurality of security modules if the security module has not been initialized (Williams, column 11 lines 17-45, configuration parameters, standby modules stay on standby until designated as primary module by management module). At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to utilize William's method of determining whether there a module is controlling or subordinate because it offers the advantage of ensuring that a primary module is always available and that a module failure will not stop system operation (Williams, column 11 lines 44-53).

Art Unit: 2134

27. **Claim 35 is rejected under 35 U.S.C. 103(a) as being unpatentable over Challener US Patent No. 7,095,859 in view of Zinsky et al US Patent No. 6,480,097.**

28. **With regards to claim 35,** Challener teaches a plurality of security modules (Challener, column 4 line 60 – column 5 line 6), but fails to teach booting the computer system once the security module is initialized. However, Zinsky teaches booting the computer system once the security module is initialized (Zinsky, column 12 lines 8-25, security device is initialized, computer begins the boot up process). At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to utilize Zinsky's method of booting up because it offers the advantage of providing enhanced security by ensuring protection of system resources (Zinsky, column 2 lines 13-26).

Allowable Subject Matter

29. Claim 6 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter: The cited prior art fails to teach or suggest the act of copying the measurement of the system into the subordinate security module. As a result, the cited prior art fails to anticipate or render obvious the above cited claim.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

30. Brickell US PGPub 2004/0205341 discloses a method of establishing trust without revealing identity.
31. Tsosie US PGPub 2004/0181327 discloses a vehicle security system with an automatic control system.
32. Grawrock US Patent No. 6,948,065 discloses a platform and method for securely transmitting an authorization secret.
33. Arnold et al US PGPub 2003/0177401 discloses a system for using a unique identifier for encryption key derivation.
34. Weaver III et al US Patent No. 7,069,449 discloses a method for encrypting and storing content to a user.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Andrew L. Nalven whose telephone number is 571 272 3839. The examiner can normally be reached on Monday - Thursday 8-6, Alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kambiz Zand can be reached on 571 272 3811. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2134

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Andrew Nalven

